



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,825	09/12/2003	Shinichiro Watanabe	KIOI:036	7722

7590 09/01/2006
ROSSI & ASSOCIATES
P.O. Box 826
Ashburn, VA 20146-0826

EXAMINER

CHARLES, MARCUS

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,825	Applicant(s) WATANABE ET AL.	
	Examiner Marcus Charles	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-3 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/25/06 & 6/08/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed 6-28-2006, which has been entered.

Claims 1-3 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 9, the intended scope of the claim is unclear and confusing because it is not clear what value of the secondary pressure that must be multiplied; it is unclear if the phrase "intended to be specified" is a positive language of the claim. In addition, it is unclear if the limitations after the phrase are part of the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3682

5. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inamura (US 6,800,044) in view of Miyagawa et al. (6,547,694). Inamura discloses a speed change control apparatus of a CVT comprising primary and secondary pulleys (15, 16), the primary pulley is inherently connected to the engine side (2/3) and the second pulley connected to the output shaft (14); an oil pump (30) inherently connected to the engine for generating pressure to the line pressure for operating the primary pulley; a hydraulic control section (40) that controls the line pressure and the secondary pressure (see 36); a range detecting mechanism (41) that detects the range to be selected; a primary rotation sensor (44) that detects the rotational speed of the output shaft from the engine to the primary pulley. It is apparent that the hydraulic control section is operable during the time interval of the change from the driving range to the non-driving range and vice versa. Inamura inherently discloses the control unit calculating the value of the line pressure according to the oil amount balance of the oil pump relative to the engine speed and controlling the line pressure according to the calculated line pressure but fails to disclose the an engine speed detecting means for detecting the speed of the engine and also, fails to disclose the control unit is operable during the period of time after driving range to the non driving range or the non driving range to the driving range has been detected for calculating the value of the line pressure according to the oil amount balance relating to the engine speed and controlling the line pressure according to the calculated value of the line pressure. Miyagawa et al. discloses a hydraulic control system for CVT such that the control unit compares the actual transmission ratio and controls the line pressure depending on the completion of the

shift and base on the signal of the inhibitor switch, which determines when the shift lever is in the driving range and non-driving range and an engine speed detecting means (Ne). Therefore, it would be obvious to one of ordinary skill in the art the time of the invention to modify the device of Inamura so that the control unit is operable during the period of time after driving range the non driving range or the non driving range to the driving range in view of Miyagawa et al. in order to allow for inadvertently axial movement of the pulley sheaves and to induce proper clamping forces on the belt and to further provide a engine speed sensor so as to determine the torque of the transmission

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inamura in view of Miyagawa et al. as applied to claim 1 above, and further in view of JP (401153851) to Murono et al. Inamura discloses the claimed invention except for an oil temperature sensor that detects a temperature in the CVT. Murono et al. discloses that It is well know in the art to incorporate an oil temperature sensor in cvt in order to detect the condition of the oil so as to control the line pressure and thus determine whether to increase or decrease the line pressure at the time of high or low pressure via the control valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the device of Inamura with a oil temperature sensor in view of Murono et al. as to control the line pressure so as to determine whether to increase or decrease the line pressure at the time of high or low pressure via the control valve.

Allowable Subject Matter

7. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Citation


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Tanaka et al (4,923,433), Ajimoto (6,733,417) and Kato et al. (5,067,603 disclose a CVT with a engine speed sensor.

Response to Arguments

9. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Marcus Charles
Primary Examiner
Art Unit 3682
August 28, 200